



Investigation of climate change in Iran

Author(s): Amiri MJ, Eslamian SS
Year: 2010
Journal: Journal of Environmental Science and Technology. 3 (4): 208-216

Abstract:

The Islamic Republic of Iran lies in western Asia. In the north it is littoral to the Caspian Sea and borders Azerbaijan and Turkmenistan. It is contiguous with Turkey and Iraq to the West. In the South the country is littoral to the Persian Gulf and the Sea of Oman and abuts Pakistan and Afghanistan to the East. The principal and official language is Farsi (Persian). The population in 1994 (the base year) was about 57.7 million (now estimated at 72.0 million). The area coverage of different types of climate in Iran is 35.5% hyper-arid, 29.2% arid, 20.1% semi-arid, 5% Mediterranean and 10% wet (of the cold mountainous type). Thus more than 82% of Iran's territory is located in the arid and semi-arid zone of the world. The average rainfall in Iran is about 250 mm, which is less than 1/3 of the average rainfall in the world (860 mm). In addition, this sparse precipitation is also unfavorable with respect to time and location. Another important climatic element is extreme temperature changes that sometimes range from -20 to +50°C. Severe drought is also recognized as a feature of Iran's climate. In the last three years, the country has suffered severe desiccation and this lack of rainfall has resulted in extensive losses. Based on the research and assessment carried out during the Climate Change Enabling Activity Project under UNFCCC and using the scenarios proposed by IPCC, it is estimated that if the CO₂ concentration doubles by the year 2100, the average temperature in Iran will increase by 1.5-4.5°C which will cause significant changes in water resources, energy demand, agricultural products and coastal zones. The direct adverse impacts of climate change include changes in precipitation and temperature patterns, water resources, sea level rise and coastal zone, agriculture and food production, forestry, drought frequency and intensity and human health. The indirect adverse economic impacts result from the response measures taken by the developed countries.

Source: <http://dx.doi.org/10.3923/jest.2010.208.216>

Resource Description

Communication:

resource focus on research or methods on how to communicate or frame issues on climate change;
surveys of attitudes, knowledge, beliefs about climate change

A focus of content

Communication Audience:

audience to whom the resource is directed

Policymaker, Researcher



Climate Change and Human Health Literature Portal

Exposure :

weather or climate related pathway by which climate change affects health

Ecosystem Changes, Extreme Weather Event, Food/Water Security, Food/Water Security, Sea Level Rise

Extreme Weather Event: Drought

Food/Water Security: Agricultural Productivity

Geographic Feature:

resource focuses on specific type of geography

Ocean/Coastal

Geographic Location:

resource focuses on specific location

Non-United States

Non-United States: Asia

Asian Region/Country: Other Asian Country

Other Asian Country: Iran

Health Impact:

specification of health effect or disease related to climate change exposure

General Health Impact

Intervention:

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Adaptation

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Low Socioeconomic Status

Resource Type:

format or standard characteristic of resource

Research Article

Timescale:

Climate Change and Human Health Literature Portal

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment:

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content